



DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

Docket Number: [131211999-3999-01]

Solicitation of Letters of Interest to Form Participating Research Teams at the NIST Center for Neutron Research

AGENCY: National Institute of Standards and Technology, Commerce.

ACTION: Notice.

SUMMARY: The National Institute of Standards and Technology (NIST) Center for Neutron Research (NCNR) announces its intent to form collaborations, called “Participating Research Teams” (PRTs), to develop and apply advanced cold and thermal neutron beam measurement capabilities at the NCNR to assist crucial and timely U.S. R&D on the structure and dynamics of advanced materials that enhance technology and manufacturing. The NCNR is therefore soliciting letters of interest in forming PRTs, which will be open to one or more U.S. companies, universities, and/or government agencies. Any resulting PRTs will be implemented through a Cooperative Research and Development Agreement (CRADA) with NCNR. The appropriate

percentage of cost sharing among the non-federal partners will be determined as part of the negotiations to form the PRT, and will be documented in the CRADA.

DATES: Letters of interest will be received on an ongoing basis, anticipated to continue for up to five years following publication of this notice. Should a date be reached when letters of interest will cease to be accepted, a notice will be posted at www.ncnr.nist.gov.

ADDRESSES: Interested parties should send letters to Dr. Robert Dimeo, Director, NIST Center for Neutron Research, 100 Bureau Drive, Gaithersburg, MD 20899–6100, or via email to robert.dimeo@nist.gov.

FOR FURTHER INFORMATION CONTACT: Dr. Dan Neumann, Group Leader, Neutron Condensed Matter Science (NCMS), NIST Center for Neutron Research, 100 Bureau Drive, Mail Stop 6102, Gaithersburg, MD 20899-6102, (301) 975-5252, or via email to dan.neumann@nist.gov.

SUPPLEMENTARY INFORMATION: The National Institute of Standards and Technology (NIST) Center for Neutron Research (NCNR), which is located at NIST in Gaithersburg, MD, intends to form collaborations, called PRTs, to develop and apply advanced cold and thermal neutron beam measurement capabilities at the NCNR to assist crucial and timely U.S. R&D on the structure and dynamics of advanced materials of technological relevance, such as polymers, nanomaterials, lightweight alloys, biomaterials, magnetic materials, and colloidal systems. The collaboration agreements will be based upon the statutory technology transfer authorities available to NIST, including the Federal Technology Transfer Act (15 USC § 3710a). Under

these collaborations, new or existing NCNR neutron-scattering instrumentation, which are uniquely sensitive to the structure, behavior, and nanoscale properties of advanced materials, would be developed, upgraded, modified, and operated to permit the study of critical materials and devices under conditions that are directly relevant to their use and performance in technological applications. Organizations participating in a PRT would share the costs of developing and constructing neutron instrumentation and/or the operation. In return, PRT members would share access to a portion of the total time available on the capabilities developed and/or operated under the partnership. At the same time, at least 25% of the total available time would be made available to non-PRT U.S. organizations for non-proprietary research on a competitive, merit-based basis. The modes of PRT access could be tailored for either individual or joint research, and the subsequent data would be made available to the U.S. science and technology community through open publication in archived and peer-reviewed journals, or in publicly available reports. Proprietary research by both PRT and non-PRT organizations would require separate approval and the payment of established fees by the partnership organizations to assure full cost recovery to the Federal Government, including a commensurate share of the overhead operating expenses of the NCNR.

PRTs will be open to one or more U.S. companies, universities, and/or government agencies. It is anticipated that PRT agreements will be established for three-year periods, with renewal for three-year terms subject to the requirements and interests of the collaborators and the NCNR. Letters of interest for PRT's will be evaluated by an internal panel of NCNR staff on the basis of rationality and technical merit. Specifically, the following criteria and assigned weights will be used to evaluate PRT letters submitted to NCNR:

(1) Rationality. The rationality, feasibility, and coherence of the proposer's approach,

including the extent to which the proposed PRT would effectively develop and apply advanced cold and/or thermal neutron beam measurement capabilities at the NCNR to assist crucial and timely U.S. R&D on the structure and dynamics of advanced materials that enhance technology and manufacturing, and an appropriately-scaled level of effort.

(0 to 65 points)

(2) Technical Merit of Contribution. The potential technical effectiveness of the proposed work, including the value it would contribute to neutron research, and the extent to which the proposed work supports the statutory mission of NIST (to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life). **(0 to 35 points)**

Letters of interest scoring 80 points or higher as a result of the evaluation will be offered the opportunity to enter into a PRT using a CRADA or multiple CRADAs. NIST intends to form up to four PRTs and will announce on the NCNR website (www.ncnr.nist.gov) when any agreement has been executed. The NCNR Director will make one or more final PRT selections, taking into consideration the results of the reviewers' evaluations and relevance to the NCNR objectives described in this notice. Letters of interest should be submitted in accordance with the DATES and ADDRESSES sections of this notice.

Dated: May 21, 2014.

Willie E. May
Associate Director of Laboratory Programs

